## ABSTRACT OF THE INVENTION

A method and system for dynamically altering the transmission settings of one or more computing devices engaged in a real-time communication session is presented. The devices exchange meaningful and dummy control packets according to a standard control protocol. The approximate bandwidth available on the network is then calculated based on the difference in arrival times between at least one of the dummy control packets and at least one of the meaningful control packets. Once the approximate bandwidth available on the network is computed, the one or more devices adjust outgoing audio and video data streams using a quality control mechanism. The quality control mechanism enables the one or more devices to transmit data in a way that maximizes the user experience during the real-time communication session.